REMARKS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 12-18 are pending in the present application. Claims 1-11 are cancelled and Claims 12-18 are added by the present amendment. Support for the amendment can be found at least at FIGs 1-3 and 8, and at page 21, line 15 through page 31, line 16 of the specification. Thus, it is respectfully submitted that no new matter is added.

In the outstanding Office Action, Claims 1-8, 10 and 11 were rejected under 35 U.S.C. § 112, first paragraph. Claims 1-8, 10 and 11 were rejected under 35 U.S.C. § 103(a) as unpatentable over Kanazawa, et al. (U.S. Patent No. 6,140,984, herein "Kanazawa") in view of Ryan, et al. (U.S. Patent No. 4,090,109, herein "Ryan"). Claims 1-8, 10 and 11 were rejected under 35 U.S.C. § 103(a) as unpatentable over Kanazawa in view of Nakayama, et al (U.S. Patent No. 3,881,129, herein "Nakayama"), and Claim 9 was rejected under 35 U.S.C. § 103(a) over Applicants' admitted art (herein "AAA") in view of Gay, et al. (U.S. Patent No. 5,086,257, herein "Gay"). Claim 9 was also rejected under the doctrine of obviousness-type double patenting as unpatentable over Claim 2 of Hashimoto, et al. (U.S. Patent No. 6,603,263, herein "Hashimoto").

As Claims 1-11 are cancelled by the present amendment, Applicants respectfully submit that the above-noted rejections of Claims 1-11 are rendered moot. Accordingly, Applicants respectfully request the withdrawal of the rejections of Claims 1-11.

New Claim 12 is directed to a method for driving an AC plasma display panel including applying a prescribed voltage to one of n scan electrodes, another

prescribed voltage in common to two of m address electrodes connected to one of m/2 first connecting points, and *a first voltage and a second voltage individually to two second connecting points*. Further, the AC plasma display panel includes a plurality of sustain electrodes *grouped by being connected to the two second connecting points*. Thereby, a desired discharge is caused to select an ON state only in a first of n x m discharge cells.

In a non-limiting exemplary embodiment, FIG. 1 illustrates a block diagram for a plasma display device to which Applicants' method may be applied including n scan electrodes (X1 to Xn), m address electrodes (W1 to Wm) each grade-separately intersecting the n scan electrodes, and a plurality of sustain electrodes (YL1 to YLn and YR1 to YRn) extending parallel to the n scan electrodes. The m address electrodes are connected to m/2 first connecting points and the plurality of sustain electrodes (YL1 to YLn and YR1 to YRn) are grouped by being connected to two second connecting points. The two second connecting points correspond respectfully to a left side Y Driver 153 and a right side Y Driver 154.

Further, FIG. 2 illustrates a timing chart for an exemplary embodiment of Applicants' method. A prescribed voltage Vax1 is applied to a scan electrode (Xi), another prescribed voltage Vaw1 is applied in common to two of m address electrodes connected to one of the m/2 first connecting points (Wj and Wm+1-j), and a first voltage Vay1 and a second voltage 0 are applied individually to the two second connecting points. The two second connecting points correspond to a left-side row electrode YL1-YLn and a right-side row electrode YR1-YRn. Consequently, a desired discharge is caused to select an ON state *only in a first* of n x m discharge cells (see also, Specification at page 22, line 17 – page 25, line 6).

It is respectfully submitted that Claim 12, and Claims 13-18 depending therefrom, patentably distinguish over the previously cited references.

In particular, it is respectfully submitted that Kanazawa does not teach at least a plurality of sustain electrodes grouped by being connected to two second connecting points and a first voltage and a second voltage applied individually to the two second connecting points. As illustrated in FIGs. 17 and 23, Kanazawa teaches individually addressable sustain electrodes (X1 to Xn) that are not connected to a common connecting point, thereby teaching away from a plurality of sustain electrodes grouped by being connected to two connecting points. Further, FIG. 5 of Kanazawa teaches sustain electrodes 207 all commonly connected to an output of a single X Common Driver 20. In teaching a single common connection, this alternate configuration fails to teach sustain electrodes grouped by being connected to two connecting points. Consequently, Kanazawa also does not teach or suggest a method of applying a first voltage and a second voltage individually to two connecting points by which a plurality of sustain electrodes are grouped. Moreover, it is respectfully submitted that the plasma displays of secondary references Ryan and Nakayama are not cited in the Office Action as remedying this noted deficiency.

Therefore, as the cited references, either alone or in combination, do not teach or suggest all limitations of Applicants' Claim 12, Applicants respectfully submit that Claims 12-18 are allowable.

Furthermore, for the sake of argument, Applicants submit that a *prima facie* case of obviousness cannot be established in this case by combining the cited references. It is respectfully noted that the basic requirements for establishing a *prima facie* case of obviousness as set forth in MPEP § 2143 include that there must be some suggestion or motivation, either in the references themselves or in the knowledge

generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Moreover, as explicitly described in MPEP § 2143.01, the proposed modification cannot render the prior art unsatisfactory for its intended purpose, nor change the principle of operation of a reference.

Applicants respectfully submit that neither the references themselves nor knowledge generally available to one skilled in the art include sufficient motivation to combine Kanazawa with either Ryan or Nakayama. As noted in the Office Action, Kanazawa does not teach an address electrode structure having strip portions connected to an output terminal of the driving unit in common (see Office Action at page 4), referring to cancelled Claim 11. Likewise, it is respectfully submitted that Kanazawa also does not teach m address electrodes connected to m/2 first connecting points in two-to-one correspondence. In light of this deficiency in the primary reference, Ryan and Nakayama are applied. Additionally, the Office Action asserts that both Ryan and Nakayama provide motivation for such combinations with Kanazawa (see Col. 1, lines 50-59, of Ryan and Col. 1, lines 7-9, of Nakayama) in reducing the number of address electrode terminals.

It is respectfully submitted that one skilled in the art would not be motivated to combine the teachings of either Ryan or Nakayama with Kanazawa in view of the differing principles of operation between the AC plasma display of Kanazawa and the discharge-shifting plasma displays of the secondary references. In particular, the discharge-shifting devices described by Ryan and Nakayama implement operating methods that include shifting discharges among adjacent cells. This shifting method of driving a display relies upon a discharge in one discharge cell to prepare an adjacent discharge cell for discharge.

In particular, Ryan describes a gas discharge display including address electrodes 36, Y axis electrodes 32, and shift electrodes 35 connected to receive shift signals from a generator 12 to *shift the discharge from one shift cell to another in sequence along the addressing electrode.* (see Ryan at Col. 5, line 17 – Col. 6, line 17 and Col. 11, line 60 – Col. 12, line 7). Similarly, Nakayama describes a gas discharge device including a first electrode X1, a second electrode X2, a third electrode X3, and a Y electrode forming discharge cells that are driven to achieve a logical multiplying operation between external terminals and the electrodes by shifting a discharge spot across Y electrodes (see Nakayama at Col. 3, lines 51-63). The shifting driving methods of Ryan and Nakayama enable these prior art devices to propagate discharges across a display. In contrast, by design, Kanazawa enables individual and independent addressing and discharge of discharge cells (for example, see Kanazawa at Cols. 1 through 7).

In the plasma displays of Ryan and Nakayama, commonly connected address electrodes are only possible because they are characterized in that only the next-in-series display element is made capable of display. Addressing of other display elements are not of concern. In contrast, in Kanazawa, all display elements are potentially operable, and the "next-in-series" principle of of Ryan and Nakayama does not apply. Therefore, the commonly connected address electrodes of of Ryan and Nakayama are not per se, absent some other mechanism by which erroneous addressing is prevented, applicable to the plasma display of Kanazawa.

In view of the above-noted difference in operating principles, Applicants' respectfully submit that simply combining Ryan or Nakayama with Kanazawa would likely impair the function of Kanazawa's device. More specifically, by simply incorporating address electrodes with common connections to Kanazawa, persons

skilled in the art would be concerned that the resultant device would likely be unable to uniquely address a single discharge cell. For example, merely coupling address electrodes in Kanazawa's FIGs. 5, 17, and 23 would result in the lighting of more than one discharge cell (at least one discharge cell per coupled address electrode) each time an address electrode is energized. Thus, the display of Kanazawa would no longer function desirably without additional modification of the structure and/or driving method of Kanazawa. None of the applied references teaches what modification would be further needed or even the need for making such a further modification.

In fact, additional modification of a plasma display is not taught or suggested by the references of record. Specifically, the modification of Kanazawa to rely upon a shifting method disclosed by Ryan or Nakayama appears to be explicitly contradicted by the objective of Kanazawa. For example, as illustrated at FIGs. 13 and 14 of Kanazawa, conventional AC plasma displays are adversely affected by wall charges collected on electrodes other than the desired electrode. In turn, Kanazawa provides an AC plasma display that can ensure that propagation of a space charge is small in scale and can avoid an unfavorable situation in which a discharge is caused in a line not selected or an improper discharge is caused due to a collection of the wall charge (See Col. 8, lines 12-19). Thus, Kanazawa is directed to an invention for mitigation of influence between adjacent electrodes (and similarly, discharge cells), which is in opposition to the principle of shifting discharges among discharge cells, as taught by the secondary references. In light of this disclosure in Kanazawa, it is respectfully submitted that one skilled in the art would find even less motivation to apply the structure of a display such as that described by Ryan or Nakayama that operate using a shifting driving method.

Therefore, it is respectfully submitted that one skilled in the art would not look to Ryan or Nakayama to remedy the noted deficiencies noted with regard to Kanazawa in view of Applicants' claimed invention.

Accordingly, as the combination of Kanazawa with either of Ryan or Nakayama do not satisfy at least the above requirements for establishing a *prima facie* case of obviousness, Applicants respectfully submit that new Claims 12-18 are allowable over a combination of the cited references.

Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance and an early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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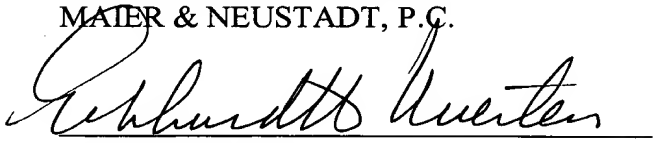

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